UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE
Northwest Region
7600 Sand Point Way N.E., Bldg. 1
Seattle, WA 98115

Refer to:
OSB1997-0693

March 6, 1997

Judy Nelson
District Manager
Eugene District Bureau of Land Management
P. O. Box 10226
Eugene, Oregon 97440

James Furnish
Forest Supervisor
Siuslaw National Forest
P. O. Box 1148
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Van Manning
District Manager
Salem District Bureau of Land Management
1717 Fabry Road SE
Salem, Oregon 97306

RE: Conference Opinion for Ongoing (through May 31, 1998) and Proposed Actions by the Siuslaw National Forest, Salem District Bureau of Land Management, and Eugene District Bureau of Land Management that May Affect Oregon Coast Coho Salmon, or Oregon Coast Steelhead in the Oregon Coast Range Province

Dear Ms. Nelson and Mssrs. Furnish and Manning:

Attached is the National Marine Fisheries Service's (NMFS) Endangered Species Act (ESA) section 7 conference opinion (Opinion) for ongoing (through May 31, 1998) and proposed actions within the Siuslaw National Forest (Siuslaw NF), the Salem District Bureau of Land Management (Salem BLM), and the Eugene District Bureau of Land Management (Eugene BLM) in the Oregon Coast Range Province. Actions covered by this Opinion are those determined by the Oregon Coast Range Province Level 1 team as "likely to adversely affect" and determined by the

NMFS as not likely to jeopardize the continued existence of Oregon Coast coho salmon (*Oncorhynchus kisutch*), or Oregon Coast steelhead (*O. mykiss*). Other anadromous salmonids were not considered at this time due to insufficient information regarding distribution and life history.

The Oregon Coast Range Province Level 1 team consists of representatives from the Siuslaw NF, the Salem BLM, the Eugene BLM, and the NMFS. Effects determinations were made by evaluating the environmental baseline (current aquatic habitat conditions) and predicting effects of actions on that baseline (see enclosed Opinion).

For the purposes of this section 7 conference, the NMFS has determined that the reviewed ongoing (through May 31, 1998) and proposed actions do not appreciably reduce the likelihood of survival and recovery of Oregon Coast coho salmon, and Oregon Coast steelhead. Full implementation of the NFP should provide habitat of sufficient quality, distribution, and abundance to allow Oregon Coast coho salmon, and Oregon Coast steelhead populations to stabilize and become well distributed across Federal lands in the Oregon Coast Range Province. This determination is based on the relationship between the conservation measures associated with the NFP Aquatic Conservation Strategy (ACS) and the biological requirements of Oregon Coast coho salmon, and Oregon Coast steelhead.

To achieve this outcome, three requirements must be met: (1) the essential components of the NFP, including ACS objectives, watershed analysis, restoration, land allocations, and standards and guidelines, should be fully applied at the four spatial scales of implementation (region, province, watershed, and site or project); (2) all management actions should comply with all applicable land allocations and standards and guidelines; and (3) all actions should promote attainment of the ACS objectives.

Although the NMFS expects some effects to the environmental baseline from actions covered by this Opinion, the effects are expected to be minor because of project design or timing. The actions covered by this Opinion are listed in Table 1 of the Opinion. As stated in the Opinion, the NMFS has determined that the actions listed in Table 1 are not likely to jeopardize the continued existence of Oregon Coast coho salmon, or Oregon Coast steelhead.

Should any of the species addressed in this Opinion become listed under the ESA, or should critical habitat be designated, the NMFS expects the attached conference opinion to serve as the basis for a biological opinion on implementation of these actions, pursuant to 50 CFR § 402.10(d). Since the ESA does not have a prohibition against take of proposed or candidate species, an Incidental Take Statement is not issued with the attached conference opinion.

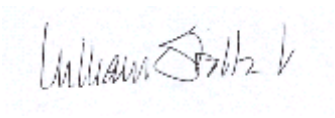
The Biological Assessments (BAs) submitted by the Siuslaw NF, the Salem BLM, and the Eugene BLM describe all ongoing (through May 31, 1998) and proposed actions that may affect Oregon Coast coho salmon, or Oregon Coast steelhead. The BAs split "may affect" actions into two determination categories: 1) actions that may affect, but are not likely to adversely affect (NLAA) Oregon Coast coho salmon, or Oregon Coast steelhead; and 2) actions that may affect, and are likely to adversely affect (LAA) Oregon Coast coho salmon, or Oregon Coast steelhead. The Siuslaw NF, the Salem BLM, and the Eugene BLM requested concurrence from the NMFS on the NLAA actions, and initiated formal conferencing with the NMFS on the LAA actions.

The NMFS has concluded informal conferencing on the NLAA actions described in the BAs, in a November 26, 1996, letter, from William Stelle, Jr. (NMFS) to the affected National Forest Supervisor and BLM District Managers.

The Level 1 team discussed, but could not reach consensus, upon the following actions: 1) Vingie Creek Water Supply on the Siuslaw NF; and 2) granting permits for use of tailhold trees on Federal land. Effects determinations for use of tailhold trees differed between members of the Level 1 team. The Level 1 team will continue to discuss these actions and may refer them to Level 2.

If you have any specific questions please contact Garwin Yip at (503) 230-5419 or Steve Morris at (503) 231-2224.

Sincerely,



William Stelle, Jr.
Regional Administrator

Enclosures

cc: Eb Engelmann, Oregon Department of Transportation
Pieter Dykman, Oregon Department of Transportation

Endangered Species Act - Section 7 Conference

CONFERENCE OPINION

Ongoing (through May 31, 1998) and Proposed Actions Affecting Oregon Coast Coho Salmon, and Oregon Coast Steelhead within the Oregon Coast Range Province

Agencies: Eugene District Bureau of Land Management
Salem District Bureau of Land Management
Siuslaw National Forest

Conference
Conducted By: National Marine Fisheries Service
Northwest Region

Date Issued: March 06,1997

Refer to: OSB1997-0693

TABLE OF CONTENTS

LIST OF TABLES

I. Introduction and Background

The objective of this conference is to determine whether ongoing (through May 31, 1998) and proposed actions within the Siuslaw National Forest (Siuslaw NF), the Salem District Bureau of Land Management (Salem BLM), and the Eugene District Bureau of Land Management (Eugene BLM) (hereafter referred to as "the three administrative units") are likely to jeopardize the continued existence of Oregon Coast coho salmon, or Oregon Coast steelhead or result in the destruction or adverse modification of their critical habitat.

Actions covered by this conference are those determined by the Level 1 teams as "likely to adversely affect" Oregon Coast coho salmon, or Oregon Coast steelhead. Although the National Marine Fisheries Service (NMFS) expects these actions to adversely affect the environmental baseline, project design and/or timing reduce these effects substantially enough to avoid jeopardizing the continued existence of Oregon Coast coho salmon, and Oregon Coast steelhead. Because critical habitat has not been proposed or designated for these species, this conference does not address destruction or adverse modification of critical habitat. Should any of these species be listed under the Endangered Species Act (ESA), or should critical habitat be designated, the NMFS expects this Conference Opinion (Opinion) to serve as the basis for a biological opinion on implementation of these actions, pursuant to 50 CFR § 402.10(d).

The NMFS proposed Oregon Coast coho salmon (*Oncorhynchus kisutch*) and Oregon Coast steelhead (*O. mykiss*) as threatened under the ESA (July 25, 1995, 60 FR 38011; August 9, 1996, 61 FR 41514, respectively). Because the distributions and biological requirements of Oregon Coast coho salmon and Oregon Coast steelhead are similar, project effects on either species are considered to be the same for both species.

The NMFS is preparing status reviews of chinook salmon (*O. tshawytscha*) (June 8, 1995, 60 FR 30263) and sea-run cutthroat trout (*O. clarki*) (September 12, 1994, 59 FR 46808) in Washington, Oregon, Idaho, and California. At this time there is insufficient life history and distribution information to include either species in this conference.

Biological Assessments (BAs) describing the effects of ongoing (through May 31, 1998) and proposed actions on Oregon Coast coho salmon, and Oregon Coast winter steelhead have been submitted to the NMFS by the Siuslaw NF (BA received November 7 and 14, 1996; amendments received December 6 and December 11, 1996), the Salem BLM (BA received November 18, 1996; amendment received December 12, 1996), and the Eugene BLM (BA received November 15, 1996; amendments received December 9 and December 10, 1996).

In addition to the guidance provided by the ESA and associated implementing regulations (50 CFR § 402), additional interagency guidance and procedures have been established to streamline the consultation process (August 29, 1995, interagency memorandum between the U.S. Forest Service, the Bureau of Land Management, the U.S. Fish and Wildlife Service, and the NMFS). The purpose of the streamlining guidance and procedures is to improve the efficiency and effectiveness of the consultation process. Specifically, the guidance and procedures provide for early interagency coordination during project development and BA preparation and establish time lines for completion of consultation. The guidance discusses development and analyses of projects during interagency "Level 1" team meetings and a process to provide timely resolution of disagreements via elevation to other hierarchical interagency teams (i.e., Level 2).

The Oregon Coast Range Province Level 1 team consists of representatives from the Siuslaw NF, the Salem BLM, the Eugene BLM, and the NMFS. Level 1 team meetings were held on September 19, October 17 and 31, and November 5, 1996, to discuss and agree on the format and content of the BAs.

The BAs describe all ongoing (through May 31, 1998) and proposed actions that may affect Oregon Coast coho salmon, and Oregon Coast steelhead. The BAs split "may affect" actions into two determination categories: (1) actions that may affect, but are not likely to adversely affect (NLAA) Oregon Coast coho salmon, and Oregon Coast steelhead; and (2) actions that may affect, and are likely to adversely affect (LAA) Oregon Coast coho salmon, and Oregon Coast steelhead. The three administrative units requested concurrence from the NMFS on the NLAA actions and initiated formal conferencing with the NMFS on the LAA actions. The NMFS concluded informal conferencing on the NLAA actions with a concurrence letter on

November 26, 1996. Formal conferencing on LAA actions will be concluded with the issuance of this Opinion.

The NMFS has prepared guidance for determining the effects of human activities on anadromous fish species of concern (NMFS 1996). This guidance is based on a "Matrix of Pathways and Indicators" (Matrix), which is a simple yet holistic method of characterizing environmental baseline conditions and predicting the effects of human activities on those baseline conditions. The Matrix provides generalized ranges of functional values (i.e., properly functioning, at risk, and not properly functioning) for aquatic, riparian, and watershed parameters.

The NMFS acknowledges that generalized values provided in the Matrix may not be appropriate for all watersheds within the range of anadromous salmonids. Therefore, it encourages development of more biologically appropriate matrices in specific physiographic areas. The three administrative units, in conjunction with the Oregon Department of Fish and Wildlife and the NMFS, are in the process of appropriately modifying the Matrix for the Oregon Coast Range Province. For the purposes of this conference, the existing Oregon Coast Range Province interim Matrix (dated June 14, 1996) was used to analyze individual and grouped actions. This interim Matrix is included in Attachments 1a and 1b.

II. Proposed Actions

The "proposed actions" are the ongoing (through May 31, 1998) and proposed actions in the three administrative units within the Oregon Coast Range Province which may affect Oregon Coast coho salmon, and Oregon Coast steelhead (Table 1). The NMFS (1995) defined ongoing actions as "[t]hose actions that have been implemented, or have contracts awarded, or permits issued and (within the range of listed anadromous salmonids) for which BAs have been prepared and submitted for consultation, prior to signature of the decision notice for the proposed action (PACFISH Interim Direction)."

Table 1. Ongoing (through May 31, 1998) and proposed actions covered by this Conference Opinion.

ALL ADMINISTRATIVE UNITS--Province-Wide Actions These actions are listed programmatically; each program consists of multiple individual projects	
Environmental Education (e.g., Salmon Watch)	Road Maintenance (in stream influence zone)
Near- and In-stream Surveys	Road Right-of-Ways & Discretionary Road Use Permits
Dispersed Camping & Recreation	Pump Chances
'96 Emergency Repair of Federally-Owned Roads (ERFO) Projects	Above Ground Utilities & Utility Corridors
Siuslaw National Forest--Province-Wide Actions These actions are listed programmatically; each program consists of multiple individual projects	
Instream Fish Structures	Trail Maintenance
Fish Sampling	Infrastructure[1]
Tree Topping (in stream influence zone)	Buried Utility Lines
Blowdown Salvage	Non-Riparian Quarries
Meadow Maintenance	Non-Discretionary Water Withdrawals
Improved Boat Ramps	Grazing
Unimproved Boat Ramps	Firewood Collection
Salem District BLM--Province-Wide Actions These actions are listed programmatically; each program consists of multiple individual projects	
Instream Fish Structures	Broadcast Burns - Site Preparation
Fish Sampling	Road Decommissioning
Tree Topping (in stream influence zone)	Infrastructure[1]
Blowdown Salvage	Buried Utility Lines
Trail Maintenance	Non-Riparian Quarries
Firewood Collection	
Eugene District BLM--Province-Wide Actions These actions are listed programmatically; each program consists of multiple individual projects	
Improved Boat Ramps	Water Quality Monitoring Stations
Unimproved Boat Ramps	
NEHALEM SECTION 7 WATERSHED--HUC #17100202[2]	
Salem District BLM	
Tillamook Resource Area Firry Goon Timber Sale Gidgit Timber Sale	

Table 1. Ongoing (through May 31, 1998) and proposed actions covered by this Conference Opinion. (continued)

NESTUCCA/TILLAMOOK BAY SECTION 7 WATERSHED--HUC #17100203[2]	
Siuslaw National Forest	**Salem District BLM**
Hebo Ranger District Hampton Right-of-Way Burnt Ridge Thin Pollard Cedar Thin Hiack Thin Horn Creek Pit Andy Creek Pit East Beaver Pit	Tillamook Resource Area Neverstill Timber Sale Phoenix Commercial Thin Motorcycle Trails
SILETZ/YAQUINA SECTION 7 WATERSHED--HUC #17100204[2]	
Siuslaw National Forest	**Salem District BLM**
Hebo Ranger District Hampton Right-of-Way Lincoln City Water Supply Mennonite Camp Alsea Ranger District Big Elk Thin '97 ERFO Projects	Marys Peak Resource Area N.F. Siletz R. & Boulder Cr. Bridge Replacement Callahan Cr. Commercial Thin Sand Cr. Commercial Thin
ALSEA/YACHATS SECTION 7 WATERSHED--HUC #17100205[2]	
Siuslaw National Forest	**Salem District BLM**
Mapleton Ranger District Enchanted Valley Meadow Grazing Alsea Ranger District Randall Salado Timber Sale Ryan Wapiti II Timber Sale '97 ERFO Projects Waldport Ranger District Big Blue Timber Sale Cape Creek Quarry Coast Range Conifers Land Exchange	Marys Peak Resource Area Ernest Cr. Commercial Thin Aloha Honeygrove Commercial Thin Super Hammer Commercial Thin

Table 1. Ongoing (through May 31, 1998) and proposed actions covered by this Conference Opinion. (continued)

SIUSLAW SECTION 7 WATERSHED--HUC #17100206[2]	
Siuslaw National Forest	
Mapleton Ranger District Karnowsky Grazing Indian Creek Quarry Deadwood Quarry Elk Wallow Quarry Sweet Creek Quarry McLeod Landscape Thin North Fork Siuslaw Thin Roger Russell Salvage ID Thin Minerva Thin McLeod Upper Thin	
SILTCOOS SECTION 7 WATERSHED--HUC #17100207[2]	
Siuslaw National Forest	
Mapleton Ranger District Bell Creek Grazing	

[1] Maintenance of campgrounds, buildings, and sewage treatment facilities within the riparian zone.

[2] HUC - Hydrologic Unit Code, a U.S. Geological Survey designation of drainages.

III. Biological Information and Critical Habitat

The listing status and biological information for Oregon Coast coho salmon, and Oregon Coast steelhead are described in Attachments 1a and 1b, respectively. While critical habitat has not been proposed or designated, Attachments 1a and 1b, describe significant habitat elements for Oregon Coast coho salmon, and Oregon Coast steelhead, respectively.

IV. Evaluating Proposed Actions

The standards for determining jeopardy are set forth in Section 7(a)(2) of the ESA, and defined in its implementing regulations (50 CFR § 402). Attachment 2 describes how the NMFS applies ESA jeopardy standards to conferences for Federal land management actions in the Oregon Coast Range Province. At this time, the NMFS is unable to determine whether actions included in this conference are likely to destroy or adversely modify designated critical habitat. This determination can be made at a later date when Oregon Coast coho salmon, and Oregon Coast steelhead, critical habitat is proposed or designated.

As described in Attachment 2, the first steps in applying the ESA jeopardy standards are (1) to define the biological requirements of Oregon Coast coho salmon, and Oregon Coast steelhead; and (2) to describe the species' current status as reflected by the environmental baseline. In the next steps, the NMFS' jeopardy analysis considers how proposed actions are expected to directly and indirectly affect specific environmental factors that define properly functioning aquatic habitat essential for the survival and recovery of the species. This analysis is set within the dual context of the species' biological requirements and the existing conditions under the environmental baseline (defined in Attachments 1a and 1b). The analysis takes into consideration the overall balance of beneficial and detrimental activities taking place within the action area.

A. Biological Requirements

For this conference, the NMFS finds that the biological requirements of Oregon Coast coho salmon, and Oregon Coast steelhead are best expressed in terms of environmental factors that define properly functioning freshwater aquatic habitat

necessary for survival and recovery of the species. Individual environmental factors include water quality, habitat access, physical habitat elements, channel condition, and hydrology. Properly functioning watersheds, where all of the individual factors operate together to provide healthy aquatic ecosystems, are also necessary for the survival and recovery of Oregon Coast coho salmon, and Oregon Coast steelhead. This information is summarized in Attachments 1a and 1b, respectively.

B. Environmental Baseline

Current range-wide status of the species under the environmental baseline. Weitkamp *et al*. (1995) and Busby *et al*. (1996) describe the current population status of the Oregon Coast coho salmon Evolutionarily Significant Unit (ESU) and the Oregon Coast steelhead ESU, respectively. In the absence of adequate population data, habitat condition provides a means of evaluating the status of these species for the environmental baseline assessment.

Action Area. The “action area” is defined as “all areas to be affected directly or indirectly by the Federal action and not merely the immediate area involved in the action" (50 CFR § 402.02). Thus, the "action area" for this conference includes Federal lands managed by the three administrative units within the Oregon Coast Range Province along with intermittent and perennial stream reaches downstream of these lands.

The Oregon Coast Range Province encompasses all drainages from the Necanicum River basin to the Siuslaw River basin that flow into the Pacific Ocean. It extends eastward to the Coast Range of Oregon.

Current status of the species under the environmental baseline within the action area.
Environmental baseline conditions within the action area were evaluated for all actions included in this Opinion at the site, watershed and subbasin scales. This evaluation was based on the Oregon Coast Province interim Matrix (see Attachments 1a and 1b). This method assesses the current condition of instream, riparian, and watershed factors that collectively provide properly functioning aquatic habitat essential for the survival and recovery of the species.

Table 2 provides a summarized overview of environmental baseline conditions in the six section 7 watersheds that comprise the action area (Table 2). Environmental baseline conditions are predominantly "at risk" or "not properly functioning" in the action area.

Table 2. Environmental baseline summary by section 7 watershed for actions included in this Conference Opinion. Programmatic projects are assessed at the section 7 watershed scale, and individual project baseline conditions are assessed at the project scale. Information source is the "Checklist for documenting environmental baseline and effects of the action" (Checklist), completed for each action contained in the BAs. Each Checklist is made up of approximately 17 habitat parameters.

Administrative Unit[2]	Number of actions by dominant functional level of habitat factors[1]		
	Properly Functioning	At Risk	Not Properly Functioning
NEHALEM SECTION 7 WATERSHED--HUC #17100202			
Watershed Condition:			Not Properly Functioning
Number of Actions (P/I)[3]:			
Siuslaw NF	0 / 0	0 / 0	0 / 0
Salem BLM	0 / 0	0 / 0	17 / 3
Eugene BLM	0 / 0	0 / 0	0 / 0
NESTUCCA/TILLAMOOK BAY SECTION 7 WATERSHED--HUC #17100203			
Watershed Condition:		At Risk to Not Properly Functioning	
Number of Actions (P/I)[3]:			
Siuslaw NF	0 / 0	21 / 3	1 / 3
Salem BLM	0 / 0	0 / 0	19 / 4
Eugene BLM	0 / 0	0 / 0	0 / 0
SILETZ/YAQUINA SECTION 7 WATERSHED--HUC #17100204			
Watershed Condition:			Not Properly Functioning
Number of Actions (P/I)[3]:			
Siuslaw NF	0 / 0	1 / 3	21 / 3
Salem BLM	0 / 1	0 / 1	17 / 4
Eugene BLM	0 / 0	0 / 0	0 / 0

Table 2. Environmental baseline summary by section 7 watershed for actions included in this Conference Opinion. Programmatic projects are assessed at the section 7 watershed scale, and individual project baseline conditions are assessed at the project scale. Information source is the "Checklist for documenting environmental baseline and effects of the action" (Checklist), completed for each action contained in the BAs. Each Checklist is made up of approximately 17 habitat parameters. (continued)

Administrative Unit[2]	Number of actions by dominant functional level of habitat factors[1]		
	Properly Functioning	At Risk	Not Properly Functioning
ALSEA/YACHATS SECTION 7 WATERSHED--HUC #17100205			
Watershed Condition:			Not Properly Functioning
Number of Actions (P/I)[3]:			
Siuslaw NF	0 / 0	0 / 6	22 / 5
Salem BLM	0 / 0	0 / 0	17 / 4
Eugene BLM	0 / 0	0 / 0	0 / 0
SIUSLAW SECTION 7 WATERSHED--HUC #17100206			
Watershed Condition:			Not Properly Functioning
Number of Actions (P/I)[3]:			
Siuslaw NF	0 / 0	2 / 7	21 / 4
Salem BLM	0 / 0	0 / 0	0 / 0
Eugene BLM	0 / 0	0 / 0	9 / 1

Table 2. Environmental baseline summary by section 7 watershed for actions included in this Conference Opinion. Programmatic projects are assessed at the section 7 watershed scale, and individual project baseline conditions are assessed at the project scale. Information source is the "Checklist for documenting environmental baseline and effects of the action" (Checklist), completed for each action contained in the BAs. Each Checklist is made up of approximately 17 habitat parameters. (continued)

Administrative Unit[2]	Number of actions by dominant functional level of habitat factors[1]		
	Properly Functioning	At Risk	Not Properly Functioning
SILTCOOS SECTION 7 WATERSHED--HUC #17100207			
Watershed Condition:			Not Properly Functioning
Number of Actions (P/I)[3]:			
Siuslaw NF	0 / 0	0 / 0	20 / 1
Salem BLM	0 / 0	0 / 0	0 / 0
Eugene BLM	0 / 0	0 / 0	0 / 0
Total:			
Programmatic	0	24	162
Individual	1	20	31

[1] The dominant functional level (either properly functioning, at risk, or not properly functioning) is that in which the majority of the approximately 17 habitat parameters are categorized in the Checklist completed for each action in the BAs. Both functional levels are counted if there is a tie.

[2] Programmatics are counted separately for each administrative unit within a watershed.

[3] (P/I): Programmatic actions / Individual actions.

Based on the best information available on the current status of Oregon Coast coho salmon, and Oregon Coast steelhead (Attachments 1a and 1b, respectively), and the NMFS' assumptions given the information available regarding (1) population status, population trends, and genetics (pages 3-4 of Attachment 2), and (2) the environmental baseline conditions within the action area (Table 2), the NMFS concludes that the biological requirements of Oregon Coast coho salmon, and Oregon Coast steelhead, are currently not being met under the environmental baseline within the action area. Significant improvement in habitat conditions is needed to meet the biological requirements for survival and recovery of these species. Actions that do not maintain or restore properly functioning aquatic habitat conditions would be likely to jeopardize the continued existence of Oregon Coast coho salmon, and Oregon Coast steelhead, due to the high level of risk these species presently face under the degraded environmental baseline.

V. Analysis of Effects

A. Effects of Proposed Actions. The effects determinations in the BAs were made using NMFS (1996) to evaluate the environmental baseline (current aquatic conditions) and to predict effects of actions on that baseline. The effects of actions are expressed in terms of the expected effect (restore, maintain, or degrade) on each of approximately 17 aquatic habitat factors in the project area, as described in the "Checklist for documenting environmental baseline and effects of the action" (Checklist) completed for each action.

The NMFS evaluated the effects of ongoing and proposed actions using the following three requirements: (1) the essential components of the Northwest Forest Plan (NFP), including Aquatic Conservation Strategy (ACS) objectives, watershed analysis, restoration, land allocations, and standards and guidelines, should be fully applied at the four spatial scales of implementation (region, province, watershed, and site or project); (2) all management actions should comply with all applicable land allocations and standards and guidelines; and (3) all actions should promote attainment of the ACS objectives.

The results of the completed Checklist for each action provide a basis for determining the overall effect of the action on

the environmental baseline in the project area. All actions covered in this Opinion are expected to either degrade at least one of the 17 aquatic habitat factors described in the Checklist or maintain a degraded condition. Degradation was attributed to minor, short-lived adverse effects.

Tree Topping within Riparian Zones

Trees are topped to create wildlife habitat; work is limited to areas within timber sales. Topped trees represent decreased potential large wood input to the aquatic system, since these trees will not continue growing. However, these trees will not be removed from the immediate site, and eventually felled trees may represent a short-term increase in large wood input.

Blowdown Salvage

All machinery used for retrieval will remain on roads. Although blown down trees represent potential large wood inputs, those near roads are expected to be illegally retrieved if not claimed by the responsible administrative unit.

Firewood Harvest

Harvest occurs alongside roads and may impact nearby streams. Activity is minimally ground disturbing and only occurs within short distances from roads.

Pump Chances

Water withdrawals occur during emergency fire conditions and are not usual occurrences. No impoundments are present. The Conservation Recommendations provide measures to reduce adverse effects.

Non-Discretionary Water Withdrawals

The administrative units grant access to existing water withdrawal structures. Withdrawals typically occur at seeps or springs with no fish presence. The entities withdrawing water hold current water rights. The Conservation Recommendations provide measures to reduce adverse effects.

Dispersed Camping

Unimproved, unmaintained primitive camps are located in planned and unplanned areas. The Conservation Recommendations provide measures to reduce the adverse effects of dispersed campsites.

Environmental Education Projects; Near- and In-stream Surveys

Although some short-term disturbance may occur, these actions (1) will not further degrade existing conditions, and (2) are not responsible for the maintenance of degraded conditions.

Fish Sampling

Each administrative unit will apply for a Section 10 permit for directed take, if necessary.

Infrastructure Maintenance

This category includes maintaining the existence of and maintenance activities for campgrounds, buildings, and sewage treatment facilities within the riparian zone. The Conservation Recommendations address campground maintenance.

Meadow Maintenance

Meadows adjacent to streams are maintained in early seral stages. These meadows are limited in size and distribution. They are designed for elk forage, Oregon silverspot butterfly habitat, and noxious weed control.

Improved Boat Landings

These landings represent some encroachment upon riparian and stream bottom habitat. The three administrative units, however, do not propose to build new ramps.

Unimproved Boat Landings

These landings are generally not stabilized or hardened, and they do not have any means of preventing erosion. The Conservation Recommendations provide measures to reduce adverse effects.

Non-Riparian Rock Quarries

These quarries are not in riparian zones; major impacts are associated with increased sedimentation due to haul. The Conservation Recommendations provide measures to reduce adverse effects.

Riparian Rock Quarries

These quarries are located in riparian zones, although some are across a road from any waterway. The Conservation Recommendations provide measures to reduce adverse effects.

Road Right-of-Ways and Discretionary Road Use Permits

It is assumed that any related ground disturbance is conducted in accordance with the NFP. Indirect effects are assumed to be negligible due to project design. The Conservation Recommendations provide measures to reduce direct adverse effects.

Ground-disturbing Activities: Road Maintenance, Emergency Repair of Federally Owned Roads (ERFO) Projects, Above Ground Utilities and Utility Corridors, Buried Utility Lines, Trail Maintenance, Instream Fish Structures, and Timber Harvest

All of these activities may increase sediment delivery to streams. Reduction of sediment delivery potential is addressed by project-specific measures or by the Conservation Recommendations, as noted below.

Several ERFO projects were previously reviewed by Siuslaw NF fish biologists and the NMFS (August 1, 1996, letter from the NMFS to the Siuslaw NF). Recommendations to reduce adverse effects to anadromous salmonids were provided during this review. The Salem BLM and the Eugene BLM projects are similar in nature to those reviewed on the Siuslaw NF. Project-specific measures are expected to reduce sediment inputs to insignificant levels.

Maintenance of above-ground utility lines and corridors, installation of buried utility lines, trail maintenance, and instream fish habitat restoration projects could also result in short-term increases in sediment. Because implementation of project-specific mitigation measures are expected to reduce sediment input to streams from the projects to insignificant

levels, effects on the aquatic environment from these actions are expected to be minimal.

Some actions that are designed to have a beneficial effect on fish over the long term (e.g., construction and/or maintenance of fish habitat restoration projects, placement of instream structures and large woody debris, replacement of culverts) may also cause minor, short-term degrading effects on instream habitat. These types of actions, however, already include adequate measures to minimize adverse effects (e.g., scheduling instream work late in the dry season when there are no eggs or alevins in stream gravels).

Increases in sediment input due to road construction are expected to be minor and short-lived. All of these actions have been designed and mitigated in accordance with the NFP ACS objectives (FEMAT 1993), land allocations, and standards and guidelines.

Timber harvest can increase sediment delivery to streams, reduce pool frequencies and depths, reduce inputs of large woody debris into stream channels and onto adjacent streambanks, modify nutrient cycles important to fish, affect the food supply of fish, increase thermal variation, change micro-climates, and influence other functions important to Oregon Coast coho salmon, and Oregon Coast steelhead. Adequate streamside reserves help to reduce the effects of land management activities on streams and fish (Bisson *et al*. 1987). The streamside reserves proposed for the timber sales addressed in this Opinion are adequate to minimize these potential effects.

Grazing

This includes grazing cattle and horses, and commonly includes riparian areas for access to streams. The Conservation Recommendations provide measures to reduce adverse effects.

Coast Range Conifers Land Exchange

Low quality, fragmented fish habitat would be traded in exchange for a lesser acreage of higher quality habitat connected to a Key Watershed. Conditions on the land to be disposed may degrade since NFP standards and guidelines would no longer apply. This degradation, however, is offset by the acquisition of connected, higher quality habitat.

B. Cumulative Effects. "Cumulative effects" are defined as those effects of "future State or private activities, not involving Federal activities, that are reasonably certain to occur within the action area of the Federal action subject to consultation" (50 CFR § 402.02).

A substantial portion of spawning and rearing habitat for Oregon Coast coho salmon, and Oregon Coast steelhead, and other anadromous salmonids occurs on land managed by the three administrative units. Gradual improvements in habitat conditions for anadromous salmonids are expected on Federal lands in the Oregon Coast Range Province as a result of NFP implementation, as guided by ESA conferences and consultations.

Historically, agriculture, livestock grazing, forestry, dredging, gravel mining, urbanization, and other activities on non-Federal land in the Oregon Coast Range Province have contributed substantially to temperature and sediment problems (TBNEP 1995; USDA-FS, Siuslaw NF 1994; USDA-FS, Siuslaw NF 1996b; USDA-FS, Siuslaw NF and USDI-BLM, Salem District 1994; USDA-FS, Siuslaw NF and USDI-BLM, Salem District 1996; USDI-BLM, Salem District 1995a; USDI-BLM, Salem District 1995b; Williamson *et al*. 1995).

Significant improvement in the reproductive success of Oregon Coast coho salmon, or Oregon Coast steelhead, on non-Federal lands is unlikely without changes in agricultural, forestry, and other practices affecting riparian areas. The NMFS is not aware of any future changes to existing State and private activities within the action area that would cause greater impacts to these species than presently occurs. The landowner or administering non-Federal agency should work with the NMFS to obtain appropriate technical assistance for actions on non-Federal lands that the landowner or agency believes are likely to adversely affect these species or their habitats. Until improvements in non-Federal land management practices are actually implemented, the NMFS assumes that future private and State actions will continue at similar intensities as in recent years.

VI. Conclusion

The ongoing (through May 31, 1998) and proposed actions on the three administrative units within the Oregon Coast Range Province considered in this Opinion, as described in the BAs (USDA-FS, Siuslaw NF 1996a; USDI-BLM, Eugene District 1996; USDI-BLM, Salem District 1996), are not likely to jeopardize the continued existence of Oregon Coast coho salmon, and Oregon Coast steelhead. The NMFS used the best available scientific and commercial data to apply its jeopardy analysis (Attachment 2) when analyzing the effects, including cumulative effects, of proposed actions on the biological requirements of the species relative to the environmental baseline.

In reaching this conclusion, the NMFS has determined that the likelihood of survival and recovery of Oregon Coast coho salmon, and Oregon Coast steelhead within the Oregon Coast Range Province can be increased by providing sufficient prespawning survival, egg-to-smolt survival, and upstream/downstream migration survival rates through the protection of and restoration to properly functioning freshwater habitat. The extent and functionality of freshwater habitat can in turn be increased if land management agencies fully and properly implement the essential components of the NFP: the ACS objectives, land allocations (including key watersheds and riparian reserves) and standards and guidelines.

The Level 1 team applied the NMFS' evaluation methodology (NMFS 1996) to the proposed actions and found that the proposed actions would cause minor, short-term adverse degradation to some essential habitat elements. The NMFS further determined that adverse habitat effects from the proposed actions would not reduce prespawning survival, egg-to-smolt survival, or upstream/downstream migration survival rates to a level that would appreciably diminish the likelihood of survival and recovery of Oregon Coast coho salmon, and Oregon Coast steelhead. Furthermore, the NMFS has determined that stabilization of well-distributed populations of these species would not be impaired by implementation of these actions. This is because all actions addressed in this Opinion are fully consistent with the NFP ACS objectives, the long-term conservation goals of which are to restore currently degraded habitats.

VII. Conservation Recommendations

Section 7(a)(1) of the ESA directs Federal agencies to utilize their authorities to further the purposes of the ESA by carrying out conservation programs for the benefit of the threatened and endangered species. Conservation recommendations are discretionary measures suggested to minimize or avoid adverse effects of a proposed action on listed species, to minimize or avoid adverse modification of critical habitat, or to develop additional information. The following conservation recommendations are consistent with these obligations and should be implemented by the three administrative units within the Oregon Coast Range Province to the maximum extent possible:

General/Procedural:

- Apply NMFS' “Matrix of Pathways and Indicators” during watershed analyses as a means of characterizing the environmental baseline for anadromous salmonids at the watershed scale.

- Include recommendations in watershed analysis reports for identifying and prioritizing actions needed to maintain and restore properly functioning salmonid habitat in the watershed.

- Review information developed through watershed and river basin analyses to determine if the key watershed network in the Oregon Coast Province needs to be expanded or otherwise modified to incorporate additional anadromous salmonid strongholds, refugia, or core habitat areas.

Road maintenance:

- Dispose of wastes in stable sites only. Develop a waste site plan for both routine activities and emergency situations.

- Do not dispose of wastes on active floodplains. This is defined as approximately 100 feet from the stream channel; a fish biologist should be consulted for specific definition.

- Sediment reaching stream channels should be minimized by:

    - following Best Management Practices;

- leaving vegetation in ditches, when possible;

- using filter strips (straw bales if vegetation strips not available) between ditch outlets and streams when appropriate - do not create more diversion potential;

- maximizing maintenance activities during the dry season so as to avoid wet periods (develop road maintenance plans and schedules which reduce impacts on key watersheds first);

- hardening culvert outlets in erodible situations.

By the end of Fiscal Year 1997, achieve expiration and omission of the statement in contracts at the Hebo Ranger District (Siuslaw NF) relieving contractors from disposing waste more than 500 feet away from its source.

Karnowsky Creek Grazing:

- Identify areas where grazing should be allowed.

- Use fencing, timing of grazing, and other measures to reestablish vegetation on active floodplains and within the stream influence zone.

Bell Creek Grazing:

- Use fencing, timing of grazing, and other measures to reestablish vegetation on active floodplains and within the stream influence zone where needed.

Enchanted Valley Meadows:

- Emphasize activities which promote attainment of ACS objectives: improving stream channel functioning and reestablishing natural meandering, increasing floodplain interaction, and establishing appropriate vegetation in riparian areas and frequently inundated floodplains.

Small municipal and small individual water withdrawal and pump chance permits:

- A fish biologist should evaluate diversion sites to determine (1) any need for fish screens and passage, and (2) effects on flows in tributaries and downstream.

Aerial utility corridor maintenance:

- Where discretion exists, do not remove riparian vegetation unless absolutely necessary.

Renewal of discretionary road use permits and right-of-ways:

- Regulate and schedule traffic to prevent damage to riparian resources.

- Where sediment is an issue, schedule haul on all-season roads. If this is not possible, monitor permittee to prevent excess sediment release.

Non-riparian rock quarries:

- When conditions warrant, anticipate and schedule haul during dry season or extended dry periods.

- Where sediment is an issue, schedule haul on all-system roads. If this is not possible, monitor permittee to prevent excess sediment release.

- Contractually require the use of high quality rock and sediment reducing procedures for haul as these are developed.

Riparian rock quarries:

- Limit all non-emergency activities to dry season or extended dry periods.

Campground maintenance:

- When constructing, reconstructing, or otherwise engaging in major work in campgrounds adjust campground use to meet ACS Objectives by, e.g., planting vegetation next to streams.

- Permit fallen large woody debris to remain where it falls in stream channels and riparian areas.

- Limit use of fords.

- Move towards attainment of ACS Objectives after catastrophic events such as floods and high wind by adjusting campground design (e.g., by reducing campground size or adjusting campsite boundaries).

Noxious weed control:
- When spraying herbicide on European beach grass, keep at least 50 feet away from water.

Dispersed camping sites:
- Monitor and evaluate dispersed campsites; harden, modify, or close access to those that hinder attainment of ACS objectives.

Unimproved boat ramps:
- Monitor and evaluate; harden or close access to those that hinder attainment of ACS objectives.

Trail maintenance and construction: No conservation measures recommended at this time.

Surveys, burning, infrastructure, fish projects: No conservation measures recommended at this time.

The NMFS requests notification when any of these conservation recommendations cannot be implemented to minimize or avoid adverse effects.

VIII. Reinitiation of Conference

Reinitiation of this conference is required: (1) if any action is modified in a way that was not previously considered in the BAs and this Opinion and may jeopardize the continued existence of the species; (2) new information or project monitoring reveals effects of the action that may affect the species in a way not previously considered; or (3) a new species is listed or critical habitat is designated that may be affected by the action (50 CFR § 402.16).

For example, the analysis included in this conference has been conducted at the project or site level. Future watershed or basin analyses may indicate that the existing environmental baseline is substantially different than indicated by this analysis. Reinitiation of this conference would be required for ongoing or continuing activities for which the environmental baseline is substantially different than originally assessed.

IX. References

Section 7(a)(2) of the ESA requires biological and conference opinions to be based on "the best scientific and commercial data available." This section identifies the data used in developing this Opinion in addition to the BAs and additional information requested by the NMFS and provided by the three administrative units.

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